

19713-651

5/15/2014

1/20



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Luz G. Chan
Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38113

MAY 15 2014

Subject: Notification; Per PR-Notice 98-10
DREXEL DE-AMINE 6
EPA Reg. No. 19713-651
Date Submitted: May 14, 2014

Dear Ms. Chan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated May 14, 2014 for the product referenced above. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions regarding this letter, please contact Kable Bo Davis at (703) 306-0415 or davis.kable@epa.gov.

Sincerely,

Kathryn Montague for
Product Manager 23
Herbicide Branch
Registration Division (7505P)



United States
Environmental Protection Agency
Washington, DC 20460

 Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 19713-651	2. EPA Product Manager Kathryn Montague	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) DREXEL DE-AMINE 6	PM# 23/Herbicide Branch	
5. Name and Address of Applicant (Include ZIP Code) Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	NOTIFICATION MAY 15 2014
<input checked="" type="checkbox"/> Resubmission in response to Agency letter dated 05/14/2014	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Submission of revised label per CDPR, correct typos and format changes. Details are in the cover letter accompanying this submission.

This notification is consistent with the provisions of PR Notice 98-10 and EPA Regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes" Unit Packaging wgt. No. per container		<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Package wgt No. per container			
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Luz G Chan	Title Registration Manager	Telephone No. (Include Area Code) (901) 774-4370
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Registration Manager	
4. Typed Name Luz G Chan	5. Date May 14, 2014	



3/20

Drexel Chemical Company

May 14, 2014

Document Processing Desk (NOTIF)
OPP(7504P), U.S. EPA
Rm S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202

**Re: Resubmission of Revised Label per EPA's Letter dated May 14, 2014
DREXEL DE-AMINE 6 (EPA Reg. No. 19713-651)**

Sir/Madam:

Herewith, please find:

1. Completed EPA Form 8570-1
2. Copy of the label (one is marked up) with the following changes per California Dept. of Pesticide Regulations (CDPR):
 - On page 4, the statement "In California, do not use this product to control Saltcedar."
 - On page 6, on filberts, added "(Not for use in California)"

We have also made the following corrections:

- On page 4, the asterisk after Dandelion denoting partial control and repeated treatments was removed to make it consistent with the Drexel De-Amine 4 (19713-650) label and other 2,4-D Amine competitors labels.
- On pages 6, 9 and 13, the typo on the statement "....cut forage or hay...." was corrected to "....cut forage *for* hay...." per the 2007 2,4-D RED labeling changes table.
- On page 13, "St. Augustine" was changed to read "St. Augustinegrass".
- On page 14, "wood" was corrected to read "woody".

Also, formatting changes (changing fractions to decimals, presentations, etc.) were made within the Directions for Use section.

If you have questions/clarification regarding this submission, I can be reached at (901) 774-4370 or e-mail lchan@drexchem.com. Thank you.

Respectfully yours,

DREXEL CHEMICAL COMPANY

Luz G Chan

Registration Manager

1700 Channel Avenue . Post Office Box 13327 . Memphis, Tennessee 38113-0327
Phone: (901) 774-4370 . Fax: (901) 774-4666 . E-Mail: info@drexchem.com . www.DrexChem.com

SINCE 1972

NOTIFICATION

MAY 15 2014

GROUP 4 HERBICIDE

4/20



De-Amine™ 6

For selective control of many Broadleaf weeds in certain crops including Asparagus; Cereal Grains (Barley, Millet, Oats, Rye, Triticale and Wheat); Corn (Field corn, Popcorn and Sweet corn); Fallow land and Crop stubble; Hops; Orchard Floors (Apple, Pear, Stone fruit and Nut); Rice; Sorghum (Grain and Forage sorghum); Soybeans (Pre-plant burndown application only); Forests; Rangeland and established Grass pastures including Conservation Reserve Program (CRP) acres; Non-cropland; Grasses grown for seed or sod; Ornamental turfgrass; and Aquatic areas.

ACTIVE INGREDIENT:

2,4-Dichlorophenoxyacetic acid dimethylamine salt* 66.2%

OTHER INGREDIENTS: 33.8%

TOTAL: 100.0%

* Equivalent to 55.1% of 2,4-Dichlorophenoxyacetic acid or 5.6 pounds per gallon.

Isomer specific by AOAC Method 6.275, 13th Ed., 1980.

KEEP OUT OF REACH OF CHILDREN

DANGER / PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See FIRST AID Below

EPA Reg. No. 19713-651

Net Content:

EPA Est. No. 19713-TN-8

2.5 Gals. (9.46 L)

FIRST AID

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Note to Physician: This product is a phenoxy type of herbicide. There is no specific antidote. Base all treatments on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: Corrosive. Causes irreversible eye damage. May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

All pilots must wear: Long-sleeved shirt, long pants, shoes and socks.

All mixers, loaders, applicators, flaggers and other handlers must wear: Coveralls over short-sleeved shirt and short pants, chemical-resistant footwear plus socks, chemical-resistant gloves, protective eyewear (goggles, face shield and safety glasses), chemical-resistant headgear for overhead exposure, and chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See Engineering Controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

ENGINEERING CONTROLS

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.



Manufactured By:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

ENVIRONMENTAL HAZARDS

For terrestrial uses: This product is toxic to aquatic invertebrates and may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Aquatic Weed Control: Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Waters having limited and less dense weed infestations may not require partial treatments.

GROUNDWATER CONTAMINATION

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Exercise precautions when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

WEED RESISTANCE MANAGEMENT

GROUP 4 HERBICIDE

This product is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 herbicides. Weed species with acquired resistance to Group 4 may eventually dominate the weed population if Group 4 herbicides are used repeatedly in the same field or in successive years as primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 4 herbicides.

To delay herbicide resistance, consider:

- Avoiding the consecutive use of this product or other target site of action Group 4 herbicides that have a similar target site of action on the same weed species.
- Using tank-mixtures or pre-mixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank-mix or pre-pack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all directions for use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains the requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on

(Continued)

AGRICULTURAL USE REQUIREMENTS (Cont.)

this label about Personal Protective Equipment (PPE) and Restricted-Entry Interval (REI). The requirements in this box only apply to uses of this product that are covered in the WPS.

Do not enter or allow worker entry into treated areas during the REI of 48 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated such as plants, soil or water is: Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, and protective eyewear (goggles, face shield, safety glasses).

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Entry Restrictions for Non-WPS Uses: Do not enter or allow people (or pets) to enter treatment areas during application. For terrestrial uses: Do not enter or allow people (or pets) to enter the treatment area until sprays have dried.

PRODUCT INFORMATION

DE-AMINE 6 is a herbicide intended for selective control of many Broadleaf weeds in certain crops including Cereal grains (Barley, Millet, Oats, Rye, Triticale and Wheat); Corn (Field corn, Popcorn and Sweet corn); Fallow land and Crop stubble; Orchard floors (Apple, Pear, Stone fruit and Nut); Rice; Sorghum (Grain and Forage sorghum); Soybeans (Pre-plant burndown application only); Forests; Rangeland and Established Grass pastures including Conservation Reserve Program (CRP) acres; Non-cropland areas; Grasses grown for seed or sod; Ornamental turfgrass; and Aquatic areas.

Apply this product as a water or oil-water spray during warm weather when weeds or woody plants are actively growing. Application under drought conditions will often give poor results. Use low spray pressure to minimize drift. Generally, the lower dosages specified on this label will be satisfactory for young, succulent growth of susceptible weed species. For less susceptible species and under conditions where control is more difficult, use higher specified rates. Deep-rooted Perennial weeds such as Canada thistle and Field bindweed and many woody plants usually require repeated applications for satisfactory control. Consult your State Agricultural Experiment stations or Extension Service Weed Specialists for recommendations from this label that best fit local conditions.

Precautions and Restrictions:

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition *et. al.* v. EPA, C01-0132C, (W.D. W.A.). For further information, please refer to EPA website: <http://www.epa.gov/espp/litstatus/wtc/index.htm>.

Do not apply this product in less than 2 gallons of total spray volume per acre.

Be sure that use of this product conforms to all applicable regulations. There may be state or local regulations affecting the use of 2,4-D herbicides in your area. Consult your state agricultural experiment station or local extension service weed specialists regarding regulations applicable to your area or specific local weed control recommendations. Do not contaminate irrigation ditches or water used for domestic purposes. Residues of 2,4-dichlorophenoxyacetic acid in the soil may temporarily inhibit seed germination or plant growth.

Chemigation: Do not apply this product through any type of irrigation system.

Crop Injury: Injury to crops may occur when this herbicide is used as specified. If you are not prepared to accept some degree of crop injury, do not use this product. Certain crop varieties may be more susceptible to 2,4-D injury. Apply this product only to crop varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, state agricultural extension service or qualified crop consultant for advice.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application

(e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a coarse or coarser spray, apply only as a coarse or coarser spray (ASAE standard 572) or volume mean-diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for non-target species, non-target crops) within 250 feet downwind. If applying a medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, Cotton, Okra, Flowers, Grapes (in Growing stage), Fruit trees (Foliage), Soybeans (Vegetable stage), Ornamentals, Sunflowers, Tomatoes, Beans and other Vegetables, or Tobacco. Small amounts of spray drift that might not be visible may injure susceptible Broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Aerial Application

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Groundboom Applications

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

MIXING

Mix this product only with water unless otherwise directed on this label. Add about half of the water to the mixing tank, then add this product with agitation, and finally add the rest of the water with continuing agitation.

Precaution: Adding oil, wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop injury.

Tank-Mixing Precautions

A jar test is recommended prior to tank-mixing to ensure compatibility of this product and other pesticides. Use a clear glass quart jar with lid and mix the tank-mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately one-half hour. If the mixture balls-up, forms flakes, sludge, gels, oily films or layers, or other precipitates, it is not compatible and the tank-mix combination should not be used.

Read and follow all directions, restrictions and precautions on this label and on the label of each product added to the spray mixture. Follow the most restrictive labeling.

Mixing with Liquid Nitrogen Fertilizer

This product may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish Broadleaf weed control and fertilization of Corn, Small grains or Pastures in a single operation. Use this product in accordance with the directions for these crops provided in this label. Use liquid fertilizer at rates specified by the supplier or Extension Service Specialist. Test for mixing compatibility as described above before mixing in spray tank. A compatibility aid may be needed in some situations. Compatibility is best with liquid fertilizer solutions containing only nitrogen. Mixing with N-P-K solutions may not be satisfactory, even with the addition of a compatibility aid. Pre-mixing 1 part of this product with up to 4 parts water may help in situations when mixing difficulty occurs.

Fill the tank about half full with the liquid fertilizer, then add the required amount of this product with agitation. Maintain agitation and complete filling the tank with liquid fertilizer. Apply immediately and continue spray tank agitation during application. Do not store the spray mixture. Do not apply during cold weather (less than 40°F) to avoid spray mixture compatibility problems.

SPRAYER CLEAN-OUT

To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned before re-use or applying other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of all rinse water by application to treatment area or apply to non-cropland area away from water supplies.
2. During the second rinse, add 1 quart of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 min.). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Remove nozzles and screens and clean separately.
6. If equipment is to be used to apply another pesticide or agricultural chemical to a 2,4-D susceptible crop, additional steps may be required to remove all traces of 2,4-D, including cleaning of disassembled parts and replacement of hoses or other fittings that may contain absorbed 2,4-D.

APPLICATIONS

Apply with calibrated air or ground equipment using sufficient spray volume to provide adequate coverage of target weeds or as otherwise directed in specific use directions. For broadcast application, use a spray volume of 2 gallons or more per acre by air and 10 gallons or more per acre for ground equipment. Where states have regulations that specify minimum spray volumes, they should be observed. In general, spray volume should be increased as crop canopy, height and weed density increase in order to obtain adequate spray coverage.

Spot Treatments

To prevent misapplication, spot treatments should be applied with a calibrated boom or with hand sprayers using a fixed spray volume per 1000 square feet as indicated below.

Hand-Held Sprayers

Hand-held sprayers may be used for spot applications in labeled crops. Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on a treatment area of 1000 square feet. Mix the amount of this product (fl. oz. or ml) corresponding to the desired broadcast rate in one (1) gallon or more of spray. To calculate the amount of this product required for larger areas, multiply the table value (fl. oz. or ml) by the number of thousands of square feet of area to be treated. An area of 1000 square feet is approximately 10.5 x 10.5 yards (strides) in size. To calculate the amount of this product required for a broadcast rate higher than those listed, use a multiple of the table value.

Spot Treatment Rate Conversion Table

Label Broadcast Rate (Pint/Acre)							
1/2	2/3	3/4	1	2	3	4	8
Equivalent Amount of This Product per 1000 sq. ft. (fl. oz.)							
1/5 (5.5 ml)	1/4 (7.3 ml)	1/3 (8.3 ml)	3/8 (11 ml)	3/4 (22 ml)	1 (33 ml)	1.5 (44 ml)	3 (88 ml)

Conversion factor: 1 fl. oz. = 29.6 (30 ml); 16 fl. ozs. = 1 pint

Band Application

This product may be applied as a band treatment. Use the formula below to determine the appropriate rate and volume per treated acre.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Herbicide Broadcast RATE per acre} = \text{Herbicide Band RATE per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME of solution per acre} = \text{Band VOLUME of solution per acre}$$

WEEDS CONTROLLED

This product will kill or control the following in addition to many other noxious plants susceptible to 2,4-D:

ANNUALS OR BIENNIALS		
Beggarticks*	Kochia	Pusley, Florida
Bittercress,	Lambsquarters,	Radish, Wild
Small-flowered	Common	Ragweed, Common
Bitterweed	Lettuce, Prickly*	Ragweed, Giant
Broomweed,	Lettuce, Wild	Rape, Wild
Common*	Lupines	Rocket, Yellow
Burdock, Common	Mallow, Little*	Salsify, Common*
Buttercup,	Mallow, Venice*	Salsify, Western*
Small-flowered*	Marshelder	Shepherdspurse
Carpetweed	Morningglory,	Sicklepod
Cinquefoil, Common	Annual	Smartweed
Cinquefoil, Rough	Morningglory, Ivy	(Annual species)*
Cocklebur, Common	Morningglory,	Sneezeweed, Bitter
Coffeeweed	Woolly	Sowthistle, Annual
Copperleaf, Virginia	Mousetail	Sowthistle, Spiny
Croton, Texas	Mustards	Spanishneedles
Croton, Woolly	(except Blue	Sunflower
Flixweed	mustard)	Sweetclover
Galinsoga	Parsnip, Wild	Tansymustard
Geranium, Carolina	Pennycress, Field	Thistle, Bull
Hemp, Wild	Pepperweed*	Thistle, Musk*
Horseweed	Pigweed	Thistle, Russian
(Marestail)	(<i>Amaranthus</i> spp.)*	(Tumbleweed)*
Jewelweed	Poorjoe	Velvetleaf
Jimsonweed	Primrose, Common	Vetch
Knotweed*	Purslane, Common	

* These weeds are only partially controlled and may require repeated applications and/or use of higher specified rates of this product even under ideal conditions of application.

PERENNIALS		
Alfalfa*	Chicory	Ivy, Ground*
Artichoke,	Clover, Red*	Loco, Bigbend
Jerusalem*	Coffeeweed	Nettles
Aster,	Cress, Hoary*	(including
Many-flowered*	Dandelion	Stinging)*
Austrian fieldcress*	Docks*	Onion, Wild*
Bindweed	Dogbanes*	Pennywort
(Hedge, Field,	Evening primrose,	Plantains
European)*	Cutleaf	Ragwort, Tansy*
Blue lettuce	Garlic, Wild*	Sowthistle,
Blueweed, Texas	Goldenrod	Perennial
Broomweed	Hawkweed,	Thistle, Canada*
Bullnettle*	Orange*	Vervains*
Carrot, Wild*	Heal-all	Waterplantain
Catnip	Ironweed, Western	Wormwood

* These weeds are only partially controlled and may require repeated applications and/or use of higher specified rates of this product even under ideal conditions of application.

OTHERS

Alder	Goatsbeard	Shepherdspurse
Alligatorweed	Goosefoot	Southern wild rose
American lotus	Gumweed	Spatterdock
Biden	Henbit	St. Johnswort
Bittersweet	Hoary cress*	Stinkweed
Bitter wintercress	Horsetail	Sumac
Blackeyed Susan	Honeysuckle	Sunflower
Blessed thistle	Indigo	Tanweed
Boxelder	Indian mallow	Tarweed
Buckhorn	Locoweed	Toadflax
Bulrush	Marijuana	Tumbleweed
Bur ragweed	Mexican weed	Virginia creeper
Chickweed	Nutsedge	Water hyacinth
Cockle	Orange hawkweed*	Water lily
Common	Parrot feather	Water primrose
waterplantain	Poison hemlock	Water shield
Creeping Jenny	Poison ivy	Wild strawberry
Curly indigo	Pokeweed	Wild sweet potato
Devil's claw	Povertyweed	Willow
(<i>Proboscidea</i>	Puncture vine	Witchweed
<i>louisianica</i>)	Purslane	Wormseed
Duckweed	Rush	Yellow rocket
Elderberry	Sagebrush	
Frenchweed	Saltcedar*	

* May require repeated application and/or use of the higher specified label rate of this product even under ideal conditions. In California, do not use this product to control Saltcedar.

CROPS

ASPARAGUS

Time of Application	Amount of This Product per Acre	Specific Use Instructions
Spring	2 to 2.75 pints	Apply this product in the Spring on actively growing weeds in 50 to 60 gallons of water per acre by ground or in 12 gallons of water per acre by air. Refer to the "WEEDS CONTROLLED" section of this label for list of weeds. If spears are present, apply this product immediately after cutting. Spears contacted by the spray may be malformed and off-flavored. If spears are malformed by spray, cut immediately and discard. Only apply as post-harvest spray using drop nozzles to avoid spraying the fern.

RESTRICTIONS FOR USE IN ASPARAGUS

- The pre-harvest interval (PHI) is 3 days.
- Limited to 2 applications per crop cycle.
- Maximum of 2.75 pints of this product per acre per application.
- Maximum of 2 lbs. a.e. per acre per application.
- Minimum of 30 days between applications.

CEREAL GRAINS (Barley, Millet, Oat, Rye, Triticale, Wheat) (Not Underseeded with Legumes)

See table for specified use rates.

Application Timing/Stage of Growth	Amount of This Product per Acre (Pints)	Specific Use Instructions
Barley, Millet, Rye, Triticale, Wheat: Post-emergence Annual and Biennial Broadleaf weeds	0.33 to 1.33*	Apply after Grain is fully tilled, but before boot stage of growth (usually about 4 to 8 inches tall) but not forming joints in the stem and weeds are small. Do not apply before tillering or during early boot through the milk stage of growth.
Barley, Millet, Rye, Triticale, Wheat: Post-emergence Perennial Broadleaf weeds	0.66 to 1.33*	
Oats: (Spring seeded)	0.33	Apply after crop is fully tillered (usually 4 to 8 inches tall) but not forming joints in the stem and weeds are small. Do not apply before tillering or during early boot through the milk stage of growth. Do not apply during or immediately following cold weather.
Oats: (Fall seeded)	0.5 to 1	
Emergency weed control in Triticale, Wheat: Perennial Broadleaf weeds	1.75	Apply when weeds are approaching bud stage, after the Grain dough stage. Do not spray during the boot-to-dough stage. The 1.75 pints per acre application can produce injury to Wheat. Balance the severity of your weed problem against the possibility of crop damage. Where Perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury.
Pre-harvest application (All Cereals)	0.66	Apply using air or ground equipment to control Cereal weeds that could interfere with harvest, or to suppress Perennial weeds. Apply when Grain is in dough stage. Do not apply during early boot through milk stage of growth.

* Use the lower rate if small Annual and Biennial weeds are the major problem. Use the higher rate if Perennial weeds or Annual and Biennial weeds are present which are in the hard-to-kill categories as determined by local experience. The higher rates increase the risk of crop injury and should be used only where the weed control problem justifies the Grain damage risk. Do not apply this product to Grain in the seedling stage. Consult your state Agricultural Experiment Station or Extension Service Weed Specialist for recommendations or suggestions to fit local conditions.

RESTRICTIONS AND LIMITATIONS FOR USE IN CEREAL GRAINS

- For aerial application on Grain, apply this product in 3 to 10 gallons of water per acre.
- For ground application, a minimum of 10 to 15 gallons of water per acre is specified for proper spray coverage.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated Grain fields within 2 weeks after treatment.
- Do not feed treated Straw to livestock if an emergency treatment as described above is applied.

- Post-emergence:
 - Limited to one application per crop cycle.
 - Maximum of 1.75 pints of this product per acre per application.
 - Do not exceed 1.25 lbs. a.e. per acre per application.
- Pre-harvest:
 - Limited to one application per crop cycle.
 - Maximum of 0.7 pint (11.2 fl. ozs.) of this product per acre per application.
 - Do not exceed 0.5 lb. a.e. per acre per application.
- Pre-harvest interval (PHI) is 14 days.

CORN (Field Corn, Popcorn, and Sweet)

Precautions: Corn hybrids vary in tolerance to 2,4-D. Apply this product only to varieties known to be 2,4-D tolerant. Consult your seed company representative or local Agricultural Experiment Station or Extension Service Weed Specialist for information on 2,4-D tolerance of Corn varieties. Application of this product may cause temporary stem brittleness in Corn. To avoid stem breakage, delay cultivation for 8 to 10 days following application.

Application Timing/Stage of Growth	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-plant (Burndown), Pre-emergence	0.66 to 1.33	General: For best results, growth conditions should be favorable for active weed growth. Use a high rate in the rate range for less susceptible weeds, cover crops such as Alfalfa, weeds in advanced stages of development, or under less favorable growth conditions. Pre-plant: Apply 7 to 14 days before planting Corn to control emerged Broadleaf weed seedling or existing cover crops. Pre-emergence: Apply any time after planting, but before Corn emerges to control Broadleaf weed seedlings or existing cover crops. Do not use on light sandy soils.
Post-emergence Annual Broadleaf weeds: Crop up to 8 inches tall	0.33 to 0.66	Apply when weeds are small and Corn is less than 8 inches tall (to top of canopy). If Corn is more than 8 inches tall, use drop nozzles and keep spray off foliage.
Post-emergence Annual Broadleaf weeds: Crop 8 inches tall to tasseling (Directed Spray only)	0.66	Treat Perennial weeds when they are in the bud-to-bloom stage. Do not tank-mix with atrazine, oil or other adjuvants. To avoid crop injury, do not apply from tasseling to hard dough stage.
Post-emergence: Perennial weeds	0.66	NOTE: Corn treated with 2,4-D may become temporarily brittle. Wind or cultivation may cause stem breakage during the period of time that Corn is brittle.
Pre-harvest (Field corn and Popcorn only)	Up to 2	Sweet Corn: To minimize potential for crop injury, use only the lowest rate in rate range. Apply after Corn is in hard dough (or denting) stage.

RESTRICTIONS AND LIMITATIONS FOR USE IN FIELD AND POPCORN

- Pre-harvest Interval (PHI) is 7 days.
- Do not harvest for Grain or fodder for 7 days following application.
- Maximum use rate per acre per crop cycle is 4.2 pints.

- Pre-plant or Pre-emergence:
 - Limited to one application per crop cycle.
 - Maximum of 1.33 pints per acre per application.
- Post-emergence:
 - Limited to one application per crop cycle.
 - Maximum of 0.66 pint per acre per application.
- Pre-harvest:
 - Limited to one application per crop cycle.
 - Maximum of 2 pints per acre per application.

RESTRICTIONS AND LIMITATIONS FOR USE IN SWEET CORN

- Pre-harvest Interval (PHI) is 45 days.
- Do not harvest for Grain or fodder for 7 days following application.
- Minimum of 21 days between applications.
- Maximum use rate per acre per crop cycle is 2 pints.
- Pre-plant or Pre-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 1.33 pints per acre per application.
- Post-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 0.66 pint per acre per application.

FILBERTS (Not for Use in California)

Target	Amount of This Product per Acre (Pints)	Specific Use Instructions
Suckers	1 to 1.33	Apply in 100 gallons of water per acre. Use nozzles with large orifice nozzles and low tank pressure. Spray to the point of runoff when suckers are 6 to 9 inches tall. Apply when needed from April through August.

RESTRICTIONS FOR USE IN FILBERTS

- Do not apply within 45 days of harvest.
- Allow at least 30 days between applications.
- Do not make more than 4 applications per year.
- Do not apply more than 1.375 pints of this product per 100 gallons of spray solution per application.
- Maximum of 1 lb. a.e. per 100 gallons of spray solution per application.

HOPS

Application Timing	Amount of This Product per Acre	Specific Use Instructions
Post-emergence	0.66 pint (10.5 fl. oz.)	Make directed applications to the row middles. Make up to 3 applications at 30 day intervals with the last application before harvest.
Precautions: Hop foliage, especially new growth, is susceptible to this product. Take care to avoid spray or drift outside target area. The use of shielded or hooded sprayers, coarse sprays and low pressure (30 psi or less) will minimize contact with foliage and plant injury.		

RESTRICTIONS AND LIMITATIONS FOR USE IN HOPS

- Pre-harvest Interval (PHI) is 28 days.
- Post-emergence:
 - Limited to 3 applications per crop cycle.
 - Maximum of 0.66 pint (10.5 fl. ozs.) of this product per acre per application.
 - Maximum of 0.5 lb. a.e. per acre per application.
 - Maximum of 1.5 lbs. a.e. of this product per acre per crop cycle.
 - Minimum 30 days between applications.
- This product contains 0.7 pound of 2,4-D per pint. When tank-mixing with products that contain 2,4-D, do not exceed a combined total of 1.5 lbs. a.e. per crop cycle.

ORCHARD FLOORS (Pome Fruits*, Stone Fruits, Tree Nuts*** and Pistachios)**

Time of Application / Target Weeds	Amount of This Product per Acre (Pints)	Specific Use Instructions
Post-emergence: Annual and Biennial weeds	0.66 to 1.33	For application to orchard floors, use coarse, low pressure sprays and sufficient water for thorough coverage of weeds. Apply to Annual weeds when small and actively growing. Apply to Perennial weeds from bud-to-bloom stage.
Post-emergence: Perennial weeds	Up to 2.66	

- * Pome fruits including Apples, Crabapples, Loquat, Mayhaw, Oriental pear, Pears, Quince
- ** Stone fruits including Apricot, Chickasaw plum, Damson plum, Fresh prunes, Japanese plums, Nectarines, Peaches, Plums, Plumcot, Sweet cherry, Tart cherry
- *** Tree nuts including Almonds, Beech nut, Black walnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, English walnut, Hickory nut, Macadamia nut (Bush nut), Pecan. (Excludes Filberts. For use on Filberts, see "FILBERTS" section.)

RESTRICTIONS AND LIMITATIONS

- **Pome Fruits:**
 - Do not apply within 14 days of harvest.
 - Maximum of 2.66 pints of this product (2 lbs. a.e.) per acre per application.
 - Allow a minimum of 75 days between applications.
 - Do not cut forage for Hay within 7 days after last application.
- **Stone Fruits:**
 - Allow at least 75 days between applications. Do not apply within 40 days of harvest.
 - Maximum of 2.66 pints of this product (2 lbs. a.e.) per acre per application.
 - Allow a minimum of at least 30 days between applications.
 - Do not cut forage for Hay within 7 days after last application.
- **Tree Nuts and Pistachios:**
 - Maximum of 2.66 pints of this product per acre per application.
 - Maximum of 2 lbs. a.e. per acre per application.
 - Allow a minimum of least 30 days between applications.
 - Do not apply within 60 days of harvest.
 - Do not cut forage for Hay within 7 days after last application.
 - Do not make more than 2 applications per year.

Use Precautions:

- Because newly established trees or young orchards are more susceptible to 2,4-D injury, apply only to orchards that are at least one year old and well-established as indicated by vigorous plant growth.
- To avoid tree injury, do not allow spray drift to contact foliage, fruit, stems, trunks or trees or exposed roots.
- Do not apply when orchards are blooming.
- Do not make orchard floor applications in areas with light sandy soils.
- Avoid application immediately before irrigation and withhold irrigation for 2 days before and 3 days after application.

RICE (Not For Use in California)

General Precautions: Rice varieties vary in tolerance to 2,4-D, or may be susceptible to injury under certain conditions or stages of growth. Do not apply at early seedling stage or after Rice internodes exceed one-half inch or panicle initiation. Consult your seed company representative or local Agricultural Experiment Station or Extension Service Weed Specialist for information on 2,4-D tolerance of Rice varieties, including optimum rates and timing.

Weeds in Crop	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-plant	0.66 to 1.33	Apply 2 to 4 weeks prior to planting Rice. DO NOT USE IN CALIFORNIA.
Post-emergence	0.66 to 1.33	Apply when Rice is in the late tillering stage of development at the time of first joint development (first to second green ring). Do not apply after panicle initiation, after Rice internodes exceed one-half inch, at early seedling, early panicle, boot or heading stages. Consult your local university or Agricultural Extension Service specialists for more specific information on rates and timing of application. DO NOT USE IN CALIFORNIA.

RESTRICTIONS AND LIMITATIONS FOR USE IN RICE

- Pre-harvest Interval (PHI) is 60 days.
- Maximum of 1.5 lbs. a.e. per acre per crop cycle.
- Pre-plant:
 - Limited to 1 application per crop cycle.
 - Maximum of 1.33 pints of this product per acre per application.
 - Maximum of 1 lb. a.e. per acre per pre-plant application.
- Post-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 1.5 lbs. a.e. per acre per application.

WILD RICE (For Use in Minnesota Only)

Application Timing	Amount of This Product per Acre (Pints)	Specific Use Instructions
Apply when Wild rice is in the 1 to 2 aerial leaf stage and after Waterplantain has emerged from the water and when Wild rice is in the 1 to 2 aerial leaf stage.	0.33	Broadcast in 4 to 10 gallons total spray volume. Do not spray after Wild rice has reached the boot stage. For use only on Wild rice grown in commercial paddies. Do not apply to Wild rice growing in lakes or streams. Water that is drained out of Wild rice paddies is not to be used to irrigate other crops. In order to protect federally listed endangered species, the Minnesota Department of Agriculture has a program to pre-notify landowners where pesticide applications may affect federally listed endangered or threatened species.

RESTRICTIONS FOR USE IN WILD RICE

- For use in Minnesota only.
- Pre-harvest interval (PHI) is 60 days.
- Post-emergence: Limited to 1 application per crop cycle. Maximum of 0.33 pint per acre per application. Maximum of 0.25 lb. a.e. per acre per application.

SORGHUM [Grain Sorghum (Milo) and Forage Sorghum]

Precautions: Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply this product under these conditions, use no more than 0.66 pint per acre. Sorghum hybrids vary in 2,4-D tolerance. Apply only to varieties known to be tolerant to 2,4-D.

Consult your seed company representative or local Agricultural Experiment Station or Extension Service Weed Specialist for information on 2,4-D tolerance of Sorghum varieties.

Weeds In Crop	Amount of This Product per Acre (Pints)	Specific Use Instructions
Grain Sorghum (Milo): 4 to 10 inches	0.33 to 1	Apply when Sorghum is 6 to 15 inches tall with secondary roots well established. If Sorghum is taller than 8 inches to top of the canopy, use drop nozzles and keep spray off the foliage. Do not use with oil or other adjuvants. Do not treat during the boot, flowering or dough stage. Higher rates may be used to control some hard-to-control weeds.
Grain Sorghum (Milo): 10 inches and above	0.5 to 1	

RESTRICTIONS AND LIMITATIONS FOR USE IN SORGHUM

- Sorghum (Milo):
 - Pre-harvest Interval (PHI) is 30 days.
 - Do not harvest Grain for 30 days.
 - Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.
- Post-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 1 lb. a.e. per acre per application.

SOYBEANS

For Use in Crop Residue Management Systems (Pre-plant Burndown Application Only)

Important Notice: Unacceptable injury to Soybeans planted in treated fields may occur. Whether or not Soybean injury occurs and the extent of such injury will depend on weather (temperatures and rainfall) from herbicide application until Soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present at the time of application. Injury is more likely to occur under cool rainy conditions and where there is less weed vegetation and crop residue present.

Application Timing	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-plant (Burndown)	0.5 to 0.66	See "PRECAUTIONS AND RESTRICTIONS FOR SOYBEANS" below.
	0.66 to 1	Apply not less than 30 days before planting Soybeans when weeds are small and actively growing. Use the higher rate on larger weeds and when Perennials are present. See "PRECAUTIONS AND RESTRICTIONS FOR SOYBEANS" below.

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may be added to spray mixtures to increase the herbicidal effectiveness on certain weeds. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture.

Tank-Mixture

This product may be applied pre-plant to Soybeans in tank-mixtures with other herbicides such as Imitator® Plus, Quik-Quat™, Honcho®, Poast®, Poast Plus®, Prowl®, Pursuit Plus®, Scepter®, Scepter Plus®,

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Squadron® and others that are registered for pre-plant use in Soybeans.

Crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may be added to spray mixtures of this product to increase the herbicidal effectiveness on certain weeds. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture. Follow the most restrictive labeling. Refer to the "MIXING" section of this label for tank-mixing instructions and compatibility testing.

PRECAUTIONS AND RESTRICTIONS FOR SOYBEANS

- Apply no less than 15 days before planting Soybeans when weeds are small and actively growing.
- **IMPORTANT:** Unacceptable injury to Soybeans planted in treated fields may occur. Whether or not Soybean injury occurs and the extent of such injury will depend on weather (temperature and rainfall) from herbicide application until Soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present at the time of application. Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present.
- Do not disturb treated soil through tillage between application and planting of Soybeans.
- Do not use on sandy soils with less than 1% organic matter.
- In treated fields, plant Soybean seed as deep as practical, but not less than 1 inch deep. Adjust the planter, if necessary, to ensure that planted seed is adequately covered.
- **Do not pre-plant apply this product in Soybeans unless you are prepared to accept the results of Soybean injury, including possible stand loss and/or yield reduction.**
- During the growing season following application, do not replant treated fields with crops other than those labeled for use with this product.
- Do not apply more than 1 lb. a.e. per acre per use season.
- Pre-plant:
 - Limited to 2 pre-plant applications per crop cycle.
 - Maximum of 0.5 lb. a.e. per acre per pre-plant application.
 - Apply no less than 15 days prior to planting Soybeans.
- Or _____
- Pre-plant:
 - Limited to 1 application per crop cycle.
 - Maximum of 1 lb. a.e. per pre-plant application.
 - Apply not less than 30 days prior to planting Soybeans.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D pre-plant use.

STRAWBERRIES (Established planting only)

Application Timing	Amount of This Product per Acre (Pints)	Specific Use Instructions
Dormant or After Last Picking	1.33 to 2	Apply in 25 to 50 gallons of water per acre. Apply in established Strawberry plantings only. Do not apply unless possible injury to the crop is acceptable. Follow recommendations of State Extension Horticultural Specialist in the area.

RESTRICTIONS FOR USE IN STRAWBERRIES:

- **DO NOT APPLY IN CALIFORNIA OR FLORIDA.**
- Dormant or after last picking: Limited to 1 application per crop cycle. Maximum of 1.5 lbs. a.e. per acre per application.

SUGARCANE

Weeds in Crop	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-emergence	2	Apply before canes appear for control of emerged Broadleaf weeds. Do not use in California.
Post-emergence	2 to 2.66	Apply after cane emerges and through lay-by (canopy closure). Use higher rate in the rate range for Perennial weeds and difficult to control weeds. Do not use in California.

RESTRICTIONS AND LIMITATIONS FOR USE IN SUGARCANE

- **DO NOT USE IN CALIFORNIA.**
- Do not harvest Cane prior to crop maturity.
- Do not apply more than 4 lbs. a.e. per acre per crop cycle.
- Pre-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 2 lbs. a.e. per acre per application
- Post-emergence:
 - Limited to 1 application per crop cycle.
 - Maximum of 2 lbs. a.e. per acre per application.

This product contains 0.7 pound a.e. of 2,4-D per pint. When tank-mixing with products that contain 2,4-D, do not exceed a combined total of 4 pounds a.e. per crop cycle.

SUGARCANE (HI Only)

Time of Application	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-emergence, Post-emergence	0.66 to 2	<p>If used in the islands of Maui and Kauai, the general wind restriction is raised to 20 mph. When applying in winds in excess of 15 mph, the following requirements are in effect:</p> <p>Aerial Application:</p> <ul style="list-style-type: none"> • No application shall be made within a distance of 1000 feet of sensitive areas such as Nature Preserves, Wildlife Refuges, Parks, Lakes, Reservoirs, Rivers, Streams, Non-irrigation Canals, Natural Ponds, Estuaries, Wetlands, Intertidal Areas, Ecologically Significant Grasslands, Homes, Public or Private buildings, or Fields with crops other than Sugarcane whenever these sensitive areas are downwind from the spray areas and subject to possible spray drift. In instances where these sensitive areas are upwind from the spray area, the minimum restricted distance shall be 300 feet. • Apply only as a coarse or coarser spray (ASAE standard 572 or a volume mean diameter of 385 microns). • Use a spray drift retardant and/or other measures known to control drift.

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(Cont.)		
Time of Application	Amount of This Product per Acre (Pints)	Specific Use Instructions
Pre-emergence, Post-emergence (Cont.)	0.66 to 2	<p>Ground-Broadcast Applications:</p> <ul style="list-style-type: none"> Apply by ground boom with nozzle-height no more than 2 feet above ground (pre-emergence) or crop canopy (post-emergent broadcast) applications or, for directed sprays, no more than 1 foot above the ground, or 1.25 feet (15 inches) for better spray patterns without boom levelers on uneven terrain. Apply only as a coarse or coarser spray (ASAE Standard 572) or a volume mean diameter of 385 microns. Use spray drift retardants and/or other measures known to control drift. <p>Applications techniques to reduce off-site drift include, but are not limited to, the use of hooded or shielded sprayers or other means to reduce drift.</p>

RESTRICTIONS FOR USE IN SUGARCANE (HI Only)

- Do not harvest Cane prior to crop maturity.
- Do not apply more than 4 lbs. a.e. per acre per year.
- Limited to 1 pre-emergence application per crop cycle.
- Post-emergence: Limited to 1 application per crop cycle. Do not apply more than 2 lbs. a.e. per acre per application. Lay-by application can be made but crop damage may occur in some Sugarcane varieties.

FALLOW LAND AND CROP STUBBLE

General Precautions

Degradation Factors: When planting into treated areas, the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm, moist soil conditions that favor rapid breakdown of 2,4-D. Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application.

Planting in Treated Areas (Labeled Crops): Plant only labeled crops within 29 days following application. Follow more specific limitations, if any, provided in directions for specific crops. Labeled crops may be at risk of crop injury or loss if planted soon after application, especially during the first 14 days. Degradation factors described below should be considered in weighing this risk.

All other crops may be planted 30 days or more after application without concern for illegal residues in the planted crop. However, under certain conditions, there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under average conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.

Types of Weeds	Amount of This Product per Acre (Pints)	Specific Use Instructions
Annual Broadleaf weeds	0.66 to 1.33	Use a lower rate in the rate range when weeds are small (2 to 3 inches tall) and conditions are favorable for active growth and a higher rate in the rate range when weeds are larger and/or growing conditions are less favorable.

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(Cont.)		
Types of Weeds	Amount of This Product per Acre (Pints)	Specific Use Instructions
Biennial Broadleaf weeds	1.33 to 2.66	Apply when Musk thistles or other Biennial species are in the seedling-to-rossette stage and before development of flower stalks. Use lower rates in the rate range in the Spring during the rosette stage and the highest rate in the rate range in the Fall or when flower stalks have developed.
Perennial Broadleaf weeds	1.33 to 2.66	Apply when Perennial weeds are in bud-to-bloom stage and actively growing. Do not disturb treated areas for at least 2 weeks after application or until top growth is dead.
Wild Garlic and Onion in crop stubble	2.66	Apply to new regrowth of Wild garlic or Onion that stubble occurs in the Fall after harvest of other crops.

RESTRICTIONS FOR USE IN FALLOW LAND

- Pre-harvest Interval: Do not cut forage for Hay within 7 days of application.
- Make no more than two applications per year.
- Do not apply more than 2.66 pints per acre per application.
- Minimum spray interval between applications is 30 days.
- Plant only labeled crops within 29 days following application.

This product contains 0.7 pound a.e. of 2,4-D per pint. When tank-mixing with products that contain 2,4-D, do not exceed a combined total of 4 pounds of a.e. per acre per year.

TURFGRASS USES

ORNAMENTAL TURF (Excluding Grasses Grown For Seed or Sod Farms)

(Includes Golf Courses, Cemeteries, Parks, Sports fields, Turfgrass, Lawns, Airfields, Roadsides, Vacant lots and other Grass areas)

Weeds in Crop	Amount of This Product per Acre (Pints)	Specific Use Instructions
Post-emergence: Seedling grass (5-leaf stage or later)	0.5 to 0.66	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth.
Post-emergence: Well-established grasses	1.33 to 2	Deep-rooted Perennial weeds such as Bindweed and Canada thistle may require repeat applications.
Post-emergence: Biennial and Perennial Broadleaf weeds	2	Do not apply to newly seeded grasses until well established (5-leaf stage or later) and then use a maximum of 0.66 pints per acre. Cool season grasses are tolerant of higher rates.

Precautions:

- Do not use on creeping grasses such as Bentgrass except as a spot treatment.
- Do not use on injury-sensitive Southern grasses such as St. Augustine-grass.
- Do not use on Dichondra or other herbaceous ground covers. Legumes may be damaged or killed.
- Do not reapply within 21 days of previous application.
- Reseeding:** Delay reseeding at least 30 days following application. Preferably, with Spring application, reseed in the Fall and with Fall application, reseed in the Spring.

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RESTRICTIONS FOR USE IN ORNAMENTAL TURF-GRASS

- Do not apply more than 2 pints per acre per application.
- Maximum of 1.5 lbs. a.e. per acre per application.
- Do not make more than 2 applications per year.
- The maximum seasonal rate is 3 lbs. a.e. per acre, excluding spot treatments.
- Minimum spray interval between broadcast applications is 30 days. This product contains 0.7 pound a.e. of 2,4-D per pint. When tank-mixing with products that contain 2,4-D, the maximum season rate is 3 lbs. a.e. per acre, excluding spot treatments.

TURF GROWN FOR SEED OR SOD

Treatment Site (Application and Timing)	Amount of This Product per acre (Pints)	Specific Use Instructions
Grasses Grown for Seed (Post-emergence): Seedling grass (5-leaf stage or later)	0.5 to 0.66	Apply when weeds are small and actively growing. For best results, apply when soil moisture is adequate for active weed growth. Do not apply to newly seeded grasses until well established (5-leaf stage or later) and then use a maximum of 0.66 pints per acre. Cool season grasses are more tolerant to higher rates.
Grasses Grown for Seed (Post-emergence): Well-established grasses	1.33 to 2.66	For grasses grown for seed, do not apply to grass in the early boot through milk stage. When grass is well-established, higher rates of up to 2.66 pints per acre may be applied for control of hard-to-kill Annual or Perennial weeds.
Sod Farms	1.33 to 2.66	Deep-rooted Perennials such as Bindweed and Canada thistle may require repeat applications. Avoid mowing Sod farms for 2 days before or after application. Delay irrigation until the day following application.

Use Precautions and Restrictions:

- Maximum rate per application is 2 lbs. a.e. per acre per application.
- Do not use on creeping grasses such as Bentgrass except for spot treatment.
- Do not use on susceptible Southern grasses such as St. Augustine-grass.
- Do not use on Dichondra or other herbaceous ground covers; Legumes may be damaged or killed.
- Do not reapply to a treated area within 21 days of a previous application.
- **Reseeding:** Delay reseeding at least 30 days following application. Preferably, with Spring application reseed in the Fall, and with Fall application, reseed in the Spring.
- Pre-harvest interval: Do not cut forage for Hay within 7 days of application.
- Do not make more than 2 applications of this product per year.

FORESTRY, RANGELAND, ESTABLISHED PASTURES AND NON-CROPLAND AREAS (Including Perennial Grasslands Not In Agricultural Production Such as Conservation Reserve Program Acres)

Agricultural Use Requirements for Forest Use (Except Tree Injection Use): For use in Forests, follow PPE and re-entry instructions in the Agricultural Use Requirements section under "DIRECTIONS FOR USE".

Agricultural Use Requirements for Rangeland, Pasture, Forest (Tree Injection Only) and Non-cropland Areas: When this product is applied to Rangeland and established Pastures not harvested for Hay or Seed; Non-cropland areas, and when applied by tree injection in Forest sites, follow re-entry requirements given in the Non-Agricultural Use Requirements section under the "DIRECTIONS FOR USE" heading of this label.

FORESTRY USES

Forest Site Preparation, Forest Roadsides, Brush Control and Established Conifer Release (Including Christmas Trees and Reforestation Areas)

Treatment Site / Method of Application	Amount of This Product per Acre	Specific Use Instructions
Annual weeds	1.33 to 2.66 pts.	Apply when weeds are small and growing actively before the bud stage. Apply when Biennial and Perennial species are in the seedling-to-rossette stage and before flower stalks appear. For difficult to control Perennial Broadleaf weeds and Woody species, use up to 5.33 pints of this product and 1 to 4 quarts of a Triclopyr (3 lbs./gal.) herbicide product per acre.
Biennial and Perennial Broadleaf weeds and susceptible Woody plants	2.66 to 5.33 pts.	
Spot Treatment to control Broadleaf weeds	0.85 fl. oz. per gallon of spray solution (See instructions for "Spot Treatment")	Note: To control Broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the specified broadcast rate and spray to thoroughly wet all foliage. See "Rate Conversion Table" and instructions for "Spot Treatment" and use of hand-held sprayers under "APPLICATIONS".
Conifer Release: Species such as White pine, Ponderosa pine, Jack pine, Red pine, Black spruce, White spruce, Red spruce, Land balsam fir	2 to 4 pts.	To control competing hardwood species such as Alder, Aspen, Birch, Hazel and Willow, apply from mid to late Summer when growth of Conifer trees has hardened

(Continued)

<i>(Cont.)</i>		
Treatment Site / Method of Application	Amount of This Product per Acre	Specific Use Instructions
Conifer Release: Species such as White pine, Ponderosa pine, Jack pine, Red pine, Black spruce, White spruce, Red spruce, Land balsam fir <i>(Cont.)</i>	2 to 4 pts.	off and Woody plants are still actively growing. Apply with ground or air equipment, using sufficient spray volume to ensure complete coverage. Because this treatment may cause occasional Conifer injury, do not apply if such injury cannot be tolerated.
Directed Spray: Conifer plantations including Pine	5.33 pts. per 100 gallons of spray solution	Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with Conifer foliage and injurious amounts of spray. Apply in oil, oil-water or water carrier in a spray volume of 10 to 100 gallons per acre.
Basal spray (May also be used in Rangeland, Pastures and Non-cropland)	10.66 pts. per 100 gallons of spray solution	Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line. Wetting stems with the mixture may aid in control.
Surface of cut stumps (May also be used in Rangeland, Pastures and Non-cropland)	1.75 fl. ozs. per gallon of water	Apply as soon as possible after cutting trees. Thoroughly wet the cambium layer of the cut surface being careful to wet the entire circumference.
Frill and Girdle (May also be used in Rangeland, Pastures and Non-cropland)	1.75 fl. ozs. per gallon of water	Cut frills (overlapping V-shaped notches)
Tree injection application (May also be used in Rangeland, Pastures and Non-cropland)	1 to 2 ml per injection site	To control and prevent the sprouting of unwanted hardwood trees such as Elm, Hickory, Oak and Sweetgum in Forest and other Non-crop areas. Apply by injecting 1 ml of this product undiluted per inch of trunk diameter as measured at breast height (OBH), approximately 4.5 feet above the

(Continued)

<i>(Cont.)</i>		
Treatment Site / Method of Application	Amount of This Product per Acre	Specific Use Instructions
Tree injection application (May also be used in Rangeland, Pastures, and Non-cropland) <i>(Cont.)</i>	1 to 2 ml per injection site	ground. Injection sites should be as close to the root collar as possible and the injection bit must penetrate the inner bark. Applications may be made throughout the year, but for best results apply between May 15 and October 15. Do not treat Maples used for Maple syrup production. For hard-to-control species such as Ash, Maple and Dogwood, use 2 ml of this product undiluted per injection site or double the number of 1 ml injections. Note: No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Use Precautions and Restrictions:

- Do not allow sprays to contact Conifer shoot growth (current year's new growth) or injury may occur.
- Do not apply to nursery seedbeds.
- For Conifer release, do not use on plantations where Larch is among the desired species.
- For broadcast applications, do not apply more than 5.33 pints of this product per acre per 12 month period. Maximum of 4 lbs. a.e. per acre per broadcast application. Limited to 1 broadcast application per year.
- For basal spray, cut surface stumps and frill applications, do not apply more than 8 lbs. a.e. per 100 gallons of spray solution. Limited to 1 basal spray or cut surface application per year.
- For injection application, limit to 1 injection application per year. Maximum of 2 ml of 4 lbs. a.e. formulation per injection site.

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Rangeland, Established Grass Pastures (Including Perennial Grasslands not in Agricultural Production such as Conservation Reserve Program Acres)

Target Weeds or Woody plants	Amount of This Product per Acre (Pints)	Specific Use Instructions
Annual Broadleaf weeds	1.33	For best results, apply when weeds are small and growing actively before the bud stage. Apply when Musk thistles or other Biennial species are in the seedling-to-rossette stage and before flower stalks appear. Refer to the "WEEDS CONTROLLED" section for a listing of susceptible weed species and weeds that may be only partially controlled and require repeat applications and/or use of higher specified rates, even under ideal conditions of application.
Biennial and Perennial Broadleaf weeds	1.33 to 2.66	
Spot treatment to control Broadleaf weeds	0.85 fl. oz. per gallon of spray solution (see instructions for "Spot Treatment")	To control Broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rate specified for this treatment site and spray to thoroughly wet all foliage. Mix 0.85 fl. oz. of spray solution per gallon and apply through pump-up sprayer or backpack sprayer. Add non-ionic surfactant to improve coverage. Refer to "Spot Treatments" section for instructions and rate conversion table under "APPLICATIONS" section of this label.
Tree injection application	—	See instructions for "Tree Injection Application" in "Forestry Uses" section.
Wild garlic and Wild onion	2.66	Make three applications (Fall-Spring-Fall or Spring-Fall-Spring) starting in late Fall or early Spring.
Broadleaf weed control in newly sprigged Coastal bermudagrass	1.33 to 2.66	Applications may be made either pre-emergence or post-emergence. Follow specific use instructions for Annual, Biennial and Perennial Broadleaf weed control above.
Sand shinnery oak, Sand sagebrush	1.33	Sand shinnery oak: Apply by aircraft between May 15 and June 15. Sand sagebrush: Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre.
Big sagebrush, Rabbitbrush	2.66	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use a 1:4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre. Retreatment may be needed.

(Continued)

(Cont.)		
Buckbrush, Chamise, Chaparral species, Coastal sage, Coyotebrush and Manzanita	2.66	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing. Use water or 1:4 oil-water emulsion as carrier and spray volume of 5 to 10 gallons per acre. Retreatment may be needed.
Southern wild rose: Broadcast application	Up to 2.66	Broadcast: Apply in a spray volume of 5 gallons or more per acre by aircraft or 10 gallons or more per acre by ground equipment.
Southern wild rose: Spot treatment	0.85 fl. oz. per gallon of spray solution	Spot treatment: Apply when foliage is well developed. Thorough coverage is required. Mix 0.85 fl. oz. of spray solution per gallon and apply through pump up sprayer or backpack sprayer. Add non-ionic surfactant. Two or more treatments may be required. Do not exceed 2.66 pints per acre per application.
CRP Acres		For program lands such as CRP, consult program rules to determine whether Grass or Hay may be used. The more restrictive requirements of the program rules or this label must be followed.

RESTRICTIONS AND PRECAUTIONS FOR USE IN PASTURES AND RANGELANDS

- Do not use on Bentgrass, Alfalfa, Clover or other Legumes.
- Do not use on newly seeded areas until grass is well-established.
- Do not use from early boot-to-milk stage where natural Grass re-seeding is desired.
- For government program Grasslands, follow program grazing restrictions if more restrictive than those given above.
- Post-emergence:
 - Do not apply more than 2 applications per year.
 - For susceptible Annual and Biennial Broadleaf weeds: Use 1 lb. a.e. per acre per application.
 - For moderately susceptible Biennial and Perennial Broadleaf weeds: Use 1 to 2 lbs. a.e. per acre per application.
 - For difficult-to-control weeds and Woody plants: Use 2 lbs. a.e. per acre per application.
 - Spot treatment: Use 2 lbs. a.e. per acre.
 - The maximum rate is 4 lbs. a.e. per acre per year.
 - Minimum of 30 days between applications.
- If Grass is to be cut for Hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

Livestock Feeding Restrictions:

- Do not cut treated Grass for Hay within 7 days after application.
- Do not graze dairy animals on treated areas within 7 days after application.
- Do not graze meat animals on treated areas within 3 days before slaughter.

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Grasses (Pastures and Rangeland Not in Agricultural Production)

Weeds in Crop	Amount of This Product per Acre (Pints)	Specific Use Instructions
Annual Broadleaf weeds	2 to 2.5	Apply when weeds are small and actively growing and prior to bud stage. Spray while Musk thistles or other Biennial species are in the seedling-to-rossette stage and before flower stalks become apparent. The lower rate can be used in the Spring during rosette stage. Use the highest rate in the Fall or after flower stalks have developed. Do not apply to newly planted areas until Grass is well established. Do not apply to Grass in the early boot through milk stage if grass seed production is desired. Bentgrass and Legumes may be injured by this treatment.
Biennial and Perennial Broadleaf weeds	2.5 to 2.85	

RESTRICTIONS AND PRECAUTIONS FOR USE IN GRASSES (Pastures and Rangeland Not in Agricultural Production)

- The pre-harvest interval (PHI) is 7 days (cut Forage for Hay).
- Post-emergence:
 - Limited to 2 applications per year.
 - Maximum of 2 lbs. a.e. per acre per application.
 - Minimum of 30 days between applications.
 - If grass is to be cut for Hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

For program lands such as Conservation Reserve Program (CRP), consult program rules to determine whether Grass or Hay may be used. The more restrictive requirements of the program rules or this label must be followed.

Non-Cropland Areas (Such as Fencerows, Hedgerows, Roadsides, Drainage ditches, Rights-of-way, Utility power lines, Railroads and other Non-crop areas)

Target Weeds or Woody plants	Amount of This Product per Acre	Specific Use Instructions
Annual Broadleaf weeds	1.33 to 2.66 pints	Apply when Annual weeds are small and growing actively before the bud stage. Biennial and Perennial weeds should be at rosette-to-bud stage, but not flowering at the time of application. For difficult to control Perennial Broadleaf weeds and Woody species, tank-mix up to 2.66 quarts of this product plus 1 to 4 quarts of Triclopyr 3A per acre. Oil or wetting agent may be added to the spray, if needed for increased effectiveness.
Biennial and Perennial Broadleaf weeds	2.66 pints	For ground application: (high volume) Apply a total spray volume of 100 to 400 gallons per acre; (low volume) apply a total spray volume of 10 to 100 gallons per acre.
Susceptible woody plants on rights-of-way	2.66 to 5.33 pints	For helicopter: Apply a total spray volume of 5 to 30 gallons per acre.

(Continued)

(Cont.)		
Target Weeds or Woody plants	Amount of This Product per Acre	Specific Use Instructions
Spot treatment to control Broadleaf weeds	0.85 fluid ounce per gallon of spray solution (See spot treatment instructions)	Note: To control Broadleaf weeds in small areas with a hand sprayer, use an application rate equivalent to the broadcast rates specified for this treatment site and spray to thoroughly wet all foliage. Mix 0.85 fluid ounce of spray solution per gallon and apply through pump-up sprayer or backpack sprayer. Add non-ionic surfactant to improve coverage. Refer to "Spot Treatment" section for instructions and rate conversion table under "APPLICATIONS" section of this label.
Woody plants: Basal spray, Cut surface, Frill and Girdle, and Tree injection application methods	—	Refer to the "Forestry Uses" section for specific use instructions for these application methods.
Southern wild rose: Broadcast application	Up to 5.33 pints	Broadcast: Apply in a spray volume of 5 gallons or more per acre by aircraft or 10 gallons or more per acre by ground equipment. Spot Treatment: Apply when foliage is well developed. Thorough coverage is required. Mix 0.85 fluid ounce of spray solution per gallon and apply through pump-up sprayer or backpack sprayer. Add non-ionic surfactant to improve coverage. Two treatments or more may be required.
Southern wild rose: Spot treatment	0.66 gallon per 100 gallons of spray solution	

RESTRICTIONS AND PRECAUTIONS FOR NON-CROPLAND AREAS

- Do not apply to newly seeded areas until grass is well established.
- Bentgrass, St. Augustinegrass, Clover, Legumes and Dichondra may be severely injured or killed by this treatment.
- Annual and Perennial weeds (post-emergence): Do not apply more than 2 lbs. a.e. per acre per use season. Do not make more than 2 applications per season. Minimum of 30 days between applications.
- Woody plants (post-emergence): Do not apply more than 4 lbs. a.e. per acre per use season. Do not make more than 1 application per year.
- Applications to Non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

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AQUATIC USES

Control of Weeds and Brush on Banks of Irrigation Canals and Ditches

Target Weeds	Amount of This Product per Acre (Pints)	Specific Use Instructions
Annual weeds	1.33 to 2.66	Apply using low pressure spray (10 to 40 psi) in a spray volume of 20 to 100 gallons per acre using power operated spray equipment. Apply when wind speed is low, 5 mph or less. Apply working upstream to avoid accidental concentration of spray into water. Cross-stream spraying to opposite banks is not permitted and avoid boom spraying over water surface. When spraying shoreline weeds, allow no more than 2 foot overspray onto water surface with an average of less than 1 foot of overspray to prevent significant water contamination.
Biennial and Perennial Broadleaf weeds and Susceptible woody plants	2.66	Apply when weeds are small and growing actively before the bud stage. Apply when Biennial and Perennial species are in the seedling-to-rossette stage and before flower stalks appear. For hard-to-control weeds, a repeat application after 30 days at the same rate may be needed. For Woody species and patches of Perennial weeds, mix 0.66 gallon (5.33 pts.) of this product per 64 to 150 gallons of total spray. Wet foliage by applying about 3 to 4 gallons of spray per 1000 square feet (10.5 x 10.5 steps).

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 treatments per season.
- Minimum of 30 days between applications.
- Use 2 gallons or more of spray solution per acre.
- Do not apply more than 2 lbs. a.e. per acre per application or more than 5.6 pints (4 lbs. a.e.) per acre per use season.
- Spot treatments are permitted.

Do not use on small canals with a flow rate less than 10 cubic feet per second (CFS) where water will be used for drinking purposes. CFS may be estimated by using the formula below. The approximate velocity needed for the calculation can be determined by observing the length of time that it takes a floating object to travel a defined distance. Divide the distance (ft.) by the time (sec.) to estimate velocity (ft. per sec.).

Repeat 3 times and use the average to calculate CFS.
 Average Width (ft.) x Average Depth (ft.) x Average Velocity (ft. per sec.) = CFS

For ditch bank weeds: Do not spray cross-stream to opposite bank. Do not allow boom spray to be directed onto water.

For shoreline weeds: Boom spraying onto water surface must be held to a minimum and allow no more than 2 foot overspray onto water with an average of less than 1 foot overspray to prevent introduction of greater than negligible amounts of chemical into the water.

Aquatic Weed Control in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage Ditches, Canals, Rivers and Streams that are Quiescent or Slow Moving, Including Programs of the Tennessee Valley Authority

Notice to Applicators: Before application, coordination and approval of local and state authorities may be required, either by letter or agreement or issuance of special permits for aquatic applications.

Emergent and Floating Aquatic Weeds: Including Water Hyacinth (*Eichornia crassipes*)

Application Rate: 2.66 to 4.66 pints of this product per acre.

Specific Use Directions

Application Timing: Spray weed mass only. Apply when Water hyacinth plants are actively growing. Repeat application as necessary to kill regrowth and plants missed in previous operation. Use the 5.3 pints per acre rate when plants are mature or when weed mass is dense.

Surface Application: Use power operated sprayers with boom or spray gun mounted on boat, tractor or truck. Thorough wetting of foliage is essential for maximum control. Use 100 to 400 gallons of spray mixture per acre. Special precautions such as use of low pressure, large nozzles and drift control agents should be taken to avoid spray drift to susceptible crops. Follow label directions for use of any drift control agent.

Aerial Application: Use drift control spray equipment or drift control products mixed in the spray mixture. Apply 0.66 gallon (5.3 pints) of this product per acre using standard boom systems using a minimum spray volume of 5 gallons per acre. For Microfoil drift control spray systems, apply this product in a total spray volume of 12 to 15 gallons per acre.

RESTRICTIONS AND LIMITATIONS FOR SURFACE APPLICATIONS TO EMERGENT AQUATIC WEEDS

- Do not exceed 4 lbs. a.e. per surface acre per application.
- Limited to 2 applications per year.
- Minimum of 21 days between applications.
- Spot treatments are permitted.

Fish breathe dissolved oxygen in the water and decaying weeds also use oxygen. When treating continuous, dense weed masses, it may be appropriate to treat only part of the infestation at a time. For example, apply the product in lanes separated by untreated strips that can be treated after vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment. Waters having limited and less dense weed infestations may not require partial treatments. Other local factors such as water exchange and sediment load can also influence the dissolved oxygen level. Coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for aquatic applications.

Water Use:

1. Water for irrigation or sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as Pastures, Turfgrass or Cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at any time after the 2,4-D aquatic application.
- B. Due to potential phytotoxicity considerations, the following restrictions are applicable: If treated water is intended to be used to irrigate or mix sprays for plants grown in commercial nurseries and greenhouses; and other plants or crops that are not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:
 - i. A setback distance from functional water intake(s) of ≥ 600 feet was used for the application, or,
 - ii. A waiting period of 7 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. Wait at least 3 days after application before initial sampling at water intake.

2. Drinking water (potable water):

- A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is

less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.

- B. For floating and emergent weed applications, the drinking water setback distance from functioning potable water intakes is ≥ 600 feet.
- C. If no setback distance of ≥ 600 feet is used for the application, applicators or the authorizing organization must provide a drinking water notification prior to a 2,4-D application to the party responsible for a public water supply or to individual private water users. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of water use restrictions when this product is applied to potable water. **The following is an example of notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under state or local law or as a condition of a permit.**

EXAMPLE:

Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting must include the day and time of application. Posting may be removed if analysis of a sample collected at the intake 3 days or more following application shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 7 days following application, whichever occurs first.

Text of notification: Wait 7 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation, or sprays, unless water at functioning drinking water intakes is tested at least 3 days after application and is demonstrated by assay to contain not more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____

- D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:
 - i. A setback distance from functional water intake(s) of ≥ 600 feet was used for the application, or,
 - ii. A waiting period of at least 7 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than 3 days after 2,4-D application. Analysis of examples must be completed by a laboratory that is certified under the Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515,555, other methods for 2,4-D as may be listed in Title 40 CFR, Part 141.24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.
- E. **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.
- F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.

Submersed Aquatic Weeds: Including Eurasian Water Milfoil (*Myriophyllum spicatum*)

Treatment Site	Maximum Application Rate ¹	Specific Use Instructions
Aquatic weed control in Ponds, Lakes, Reservoirs, Marshes, Bayous, Drainage ditches, Canals, Rivers and Streams that are quiescent or slow moving, including programs of the Tennessee Valley Authority	1.89 gallons (15.1 pints) (10.8 lbs. a.e.) per acre foot	<p>Application Timing: For best results, apply in Spring or early Summer when Aquatic weeds appear. Check for weed growth in areas heavily infested the previous year. A second application may be needed when weeds show signs of recovery, but no later than mid-August in most areas.</p> <p>Subsurface Application: Apply this product undiluted directly to the water through a boat mounted distribution system. Shoreline areas should be treated by subsurface injection application by boat to avoid aerial drift.</p> <p>Surface Application: Use power operated boat mounted boom sprayer. If rate is less than 5 gallons per acre, dilute to a minimum spray volume of 5 gallons per surface acre.</p> <p>Aerial Application: Use drift control spray equipment or drift control agents mixed with sprays to reduce drift. Apply through standard boom systems in a minimum spray volume of 5 gallons per surface acre. For Microfoil drift control spray systems, apply this product in a total spray volume of 12 to 15 gallons per acre. Apply to attain a concentration of 2 to 4 ppm (see table below).</p>

¹ This product contains 5.6 pounds a.e. per gallon of product.

Table 1: Amount to apply for a Target Subsurface Concentration

Surface Area	Average Depth (ft.)	For typical conditions – 2 ppm		For difficult conditions – 4 ppm*	
		2,4-D (lbs. a.e./acre)	This Product gal./acre	2,4-D (lbs. a.e./acre)	This Product gal./acre
1 acre	1	5.4	0.95	10.8	1.89
	2	10.8	1.89	21.6	3.79
	3	16.2	2.84	32.4	5.68
	4	21.6	3.79	43.2	7.58
	5	27.0	4.74	54.0	9.47

* Examples include spot treatments of pioneer colonies of Eurasian water milfoil and certain difficult-to-control aquatic species.

RESTRICTIONS AND LIMITATIONS FOR AQUATIC SITES WITH SUBMERSED WEEDS

Do not exceed 10.8 lbs. a.e. per acre foot per application.
 Do not apply more than 2 applications per season.
 Fish breathe oxygen in the water and a water-oxygen ratio must be maintained. Decaying weeds use up oxygen, but during the period when applications should be made, the weed mass is fairly sparse and the weed decomposition rate is slow enough that the water-oxygen ratio is not disturbed by treating the entire area at one time. If treatments must be applied later in the season when the weed mass is dense and repeat treatments are needed, apply product in lanes, leaving buffer strips which can then be treated when vegetation in treated lanes has disintegrated. During the growing season, weeds decompose in a 2 to 3 week period following treatment.

Do not apply within 21 days of previous application. When treating moving bodies of water, applications must be made while traveling upstream to prevent concentration of 2,4-D downstream from the application.

Coordination and approval of local and state authorities may be required, either by letter of agreement or issuance of special permits for such use.

Water Use:

1. Water for irrigation or sprays:

- A. If treated water is intended to be used only for crops or non-crop areas that are labeled for direct treatment with 2,4-D such as Pastures, Turfgrass or Cereal grains, the treated water may be used to irrigate and/or mix sprays for these sites at any time after the 2,4-D aquatic application.
- B. Due to potential phytotoxicity and/or residue considerations, the following restrictions are applicable:
If treated water is intended to be used to irrigate or mix spray for unlabeled crops, non-crop areas or other plants not labeled for direct treatment with 2,4-D, the water must not be used unless one of the following restrictions has been observed:
 - i. A setback distance described in the "Drinking Water Setback" Table was used for the application, or,
 - ii. A waiting period of 21 days from the time of application has elapsed, or,
 - iii. An approved assay indicates that the 2,4-D concentration is 100 ppb (0.1 ppm) or less at the water intake. See "Table 3" for the waiting period after application but before taking the initial sampling at water intake.

2. Drinking water (potable water):

- A. Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The potable water use restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of 2,4-D in the water is less than the MCL (Maximum Contaminant Level) of 70 ppb. Applicators should consider the unique characteristics of the treated waters to assure that 2,4-D concentrations in potable water do not exceed 70 ppb at the time of consumption.
- B. For submerged weed applications, the drinking water setback distances from functioning potable water intakes are provided in "Table 2: Drinking Water Setback Distance" (below).
- C. If no setback distance from the "Drinking Water Setback Table (Table 2)" is to be used for the application. Applicators or the authorizing organization must provide a drinking water notification and an advisory to shut off all potable water intakes prior to a 2,4-D application. Notification to the party responsible for a public water supply or to individual private water users must be done in a manner to assure that the party is aware of the water use restrictions when this product is applied to potable water.

The following is an example of notification via posting, but other methods of notification which convey the above restrictions may be used and may be required in some cases under state or local law or as a condition of a permit.
EXAMPLE:

Posting notification should be located every 250 feet including the shoreline of the treated area and up to 250 feet of shoreline past the application site to include immediate public access points. Posting should include the day and time of application. Posting may be removed if analysis of a sample collected at the intake no sooner than stated in Table 3 (below) shows that the concentration in the water is less than 70 ppb (100 ppb for irrigation or sprays), or after 21 days following application, whichever occurs first.

Text of notification: Wait 21 days before diverting functioning surface water intakes from the treated aquatic site to use as drinking water, irrigation or sprays, unless water at functioning drinking water intakes is tested no sooner than (insert days from Table 3) and is demonstrated by assay to contain not more than 70 ppb 2,4-D (100 ppb for irrigation or sprays).

Application Date: _____ Time: _____

- D. Following each application of this product, treated water must not be used for drinking water unless one of the following restrictions has been observed:
 - i. A setback distance described in the "Drinking Water Setback Distance" Table was used for the application, or,
 - ii. A waiting period of at least 21 days from the time of application has elapsed, or,

- iii. An approved assay indicates that the 2,4-D concentration is 70 ppb (0.07 ppm) or less at the water intake. Sampling for drinking water analysis should occur no sooner than stated in "Table 3". Analysis of samples must be completed by a laboratory that is certified under The Safe Drinking Water Act to perform drinking water analysis using a currently approved version of analytical Method Number 515,555, other methods for 2,4-D may be listed in Title 40 CFR, Part 141-24, or Method Number 4015 (immunoassay of 2,4-D) from U.S. EPA Test Methods for Evaluating Solid Waste SW-846.

E. **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well are not considered to be functioning potable water intakes.

F. Drinking water setback distances do not apply to terrestrial applications of 2,4-D adjacent to water bodies with potable water intakes.

Table 2. Drinking Water Setback Distance for Submersed Weed Applications

Application Rate and Minimum Setback Distance (feet) From Functioning Potable Water			
1 ppm*	2 ppm*	3 ppm*	4 ppm*
600	1200	1800	2400
*ppm acid equivalent target water concentration.			

Table 3. Sampling for Drinking Water Analysis After 2,4-D Application for Submersed Weed Applications

Minimum Days After Application Before Initial Water Sampling at the Functioning Potable Water Intake			
1 ppm*	2 ppm*	3 ppm*	4 ppm*
5	10	10	14
*ppm acid equivalent target water concentration.			

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs or feed by storage or disposal. **PESTICIDE STORAGE:** Keep container tightly closed when not in use. If exposed to subfreezing temperatures, the product should be warmed up to at least 40°F and mixed thoroughly before using.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal.

(Continued)

STORAGE AND DISPOSAL (Cont.)

Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Container (≥ 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture or dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

WARRANTY—CONDITIONS OF SALE

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OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically directed, and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with the directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with the directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

Disclaimer: Always refer to the label on the product before using De-Amine 6 or any other product.

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